

**NORTRON 50SC**

Version 2

Revision Date 09.10.2002

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**Product information**

Trade name : NORTRON 50SC

Product code : AE B049913 00 SC45 A1

Specification : 20768

Usage : herbicide

Company : Bayer CropScience Limited
Hauxton
Cambridge
Cambridgeshire CB2 5HU
United Kingdom

Telephone : +44(0)1223 870312

Telefax : +44(0)1223 872142

Emergency telephone number : 0800-220876 (UK only)
+44(0)1223-870312

2. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical nature**

Suspension concentrate (=flowable concentrate)(SC), contains:
Ethofumesate 500 g/l

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrased(s)	Concentration [%]
Ethofumesate	26225-79-6	N	R51/53	44.20
1,2 Propanediol	57-55-6			> 5.00 - < 25.00

3. HAZARDS IDENTIFICATION**Risk advice to man and the environment**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

General advice : Remove contaminated, soaked clothing immediately and dispose of safely.

Inhalation : Move the patient to fresh air and keep at rest. If symptoms persist, call a physician.

Skin contact : Wash off immediately with soap and plenty of water. Seek medical aid if at all worried.

**NORTRON 50SC**

Version 2

Revision Date 09.10.2002

10200000916

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|--|-------------|---|---|
| | Eye contact | : | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| | Ingestion | : | Do not induce vomiting. Wash out mouth with water. Keep at rest. Obtain medical attention. |

Notes to physician

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|--|-----------|---|--|
| | Symptoms | : | Local:, To date no symptoms are known. |
| | Symptoms | : | Systemic:, To date no symptoms are known. |
| | Treatment | : | Local treatment:
Initial treatment should be symptomatic and supportive. |
| | Treatment | : | Systemic treatment:
In the event of a mouthful or more being ingested, the following measures should be considered:
Endotracheal intubation should be done and gastric lavage performed, followed by administration of charcoal.
Monitor kidney and respiratory functions.
Monitor fluid balance.
Monitor the level of consciousness.
Elimination by dialysis (forced alkaline diuresis).
There is no antidote.
Recovery: Spontaneous. |

5. FIRE-FIGHTING MEASURES

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|--|---|---|---|
| | Suitable extinguishing media | : | water spray
alcohol-resistant foam
dry chemical
carbon dioxide (CO ₂) |
| | Extinguishing media which must not be used for safety reasons | : | Product itself is non-combustible; fire extinguishing measures to suit surroundings. |
| | Specific hazards during fire fighting | : | In case of fire the evolution of dangerous gases is possible. |
| | Special protective equipment for fire-fighters | : | In the event of fire and/or explosion do not breathe fumes. Wear self contained breathing apparatus for fire fighting if necessary. |
| | Further information | : | Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.
Whenever possible, contain fire-fighting water by bunding area with sand or earth. |



NORTRON 50SC

Version 2

Revision Date 09.10.2002

102000000916

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.
- Environmental precautions : Keep people and animals away.
Do not discharge into the drains/surface water/groundwater.
If spillage enters drains leading to sewage works inform local water company immediately.
If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).
- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations
- Additional advice : Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.
Check also for any local site procedures.

7. HANDLING AND STORAGE

Handling

- Advice on safe handling : No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.
Provide good ventilation of working area (local exhaust ventilation if necessary).
- Advice on protection against fire and explosion : No special precautions required.

Storage

- Requirements for storage areas and containers : Keep containers tightly closed in a cool, well-ventilated place.
Store in a place accessible by authorized persons only.
- Further information on storage conditions : Keep away from direct sunlight.
Protect against frost.
- Storage temperature : 0 - 30 °C
- Suitable materials : Keep in original packaging, tightly closed.

**NORTRON 50SC**

Version 2

Revision Date 09.10.2002

102000000916

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to COSHH assessment (Control of substances Hazardous to Health Regulations 1999 as amended). Engineering controls should be used in preference to personal protective equipment wherever practicable.

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
1,2 Propanediol	57-55-6	10 mg/m ³ (TWA)	2001	EH40 OES
		474 mg/m ³ (TWA)	2001	EH40 OES

Personal protective equipment

Respiratory protection	: No personal respiratory protective equipment normally required.
Hand protection	: Chemical resistant gloves PVC gloves nitrile gloves
Eye protection	: Chemical resistant goggles must be worn.
Skin and body protection	: Light protective clothing, PVC PVC boots
Hygiene measures	: When using, do not eat, drink or smoke. Remove soaked clothing immediately. Remove soiled clothing immediately. Clean hands and face at work intervals and after work. Work in an adequately ventilated room.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	: liquid
Colour	: brown

Safety data

pH	: 6.5 - 7.5 Note: Determined in the undiluted form
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Density	: ca. 1.130 g/cm ³ at 20 °C
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Partition coefficient (n-octanol/water)	: log Pow: 2.7 Note: The value mentioned relates to the active ingredient ethofumesate.
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Other information	: The product is not combustible.
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**NORTRON 50SC**

Version 2

Revision Date 09.10.2002

102000000916

10. STABILITY AND REACTIVITY

Conditions to avoid	: Note: Extremes of temperature and direct sunlight.
Materials to avoid	: None
Hazardous reactions	: No hazardous reactions when stored and handled according to prescribed instructions. Note: Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 (rat) > 2,100 mg/kg
Acute dermal toxicity	: LD50 (rat) > 4,100 mg/kg
Skin irritation	: rabbit Result: No skin irritation
Eye irritation	: rabbit Result: No eye irritation
Sensitization	: guinea pig Result: Not sensitizing (guinea pig) in Buehler test.

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

Biodegradability	: < 70 % Test substance: The value mentioned relates to the active ingredient ethofumesate. Remarks: According to the results of tests of biodegradability this product is not readily biodegradable.
Bioaccumulation	: Bluegill sunfish Bioconcentration factor (BCF): 67 - 144 Test substance: The value mentioned relates to the active ingredient ethofumesate.

Ecotoxicity effects

Toxicity to fish	: LC50: 68.0 mg/l Brachidanio rerio Exposure time: 96 h
Toxicity to daphnia	: EC50: 93.2 mg/l Water flea (Daphnia magna) Exposure time: 48 h

**NORTRON 50SC**

Version 2

Revision Date 09.10.2002

102000000916

- Toxicity to algae : IC50: 3.9 mg/l
Algae
Exposure time: 96 h
Test substance: The value mentioned relates to the active ingredient ethofumesate.
- Toxicity to other organisms : LD50: > 8,743 mg/kg
Bobwhite quail
Test substance: The value mentioned relates to the active ingredient ethofumesate.
- Toxicity to other organisms : LD50: > 3,552 mg/kg
Mallard duck
Test substance: The value mentioned relates to the active ingredient ethofumesate.

13. DISPOSAL CONSIDERATIONS

- Product : In accordance with current regulations may be taken to waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority
Can be landfilled or incinerated, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.
Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).
- Contaminated packaging : Packaging that cannot be cleaned should be disposed of as product waste.
Empty containers can be landfilled, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

14. TRANSPORT INFORMATION

- ADR/RID** : UN-No **3082**
Class 9
Packaging group III
Hazard no. 90
Description of the goods 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHOFUMESATE)
- ADNR** : UN-No **3082**
Class 9
Item 11
Letter c
Description of the goods 3082 Environmentally hazardous substance, liquid, n.o.s. (ETHOFUMESATE)

**NORTRON 50SC**

Version 2

Revision Date 09.10.2002

102000000916

IMDG	: UN-No	3082
	Class	9
	Packaging group	III
	EmS	NONE
	Marine pollutant	P
	Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHOFUMESATE 44.2%)
IATA	: UN-No	3082
	Class	9
	Packaging group	III
	Description of the goods	Environmentally hazardous substance, liquid, n.o.s. (ETHOFUMESATE 44.2%)
CDG CPL	: UN-No	3082
	Class	9
	Packaging group	III
	Hazard identification number	90
	Emergency action code	2X
	Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHOFUMESATE)

15. REGULATORY INFORMATION

This product has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3.

Hazardous components which must be listed on the label:

- Ethofumesate

Symbol(s):	: N	Dangerous for the environment
R-phrase(s)	: R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S35	This material and its container must be disposed of in a safe way. Use appropriate containment to avoid environmental contamination.
	S57	



NORTRON 50SC

Version 2

Revision Date 09.10.2002

102000000916

16. OTHER INFORMATION

Further information

Text of R phrases mentioned in Section 2:

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The above information is intended to give general health and safety guidance on the storage and transport of the product.

It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with.

The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.

No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

Changes since the last version will be highlighted in the margin. This version replaces all previous versions.